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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.     | CONFIRMATION NO. |
|---|-------------|----------------------|-------------------------|------------------|
| 09/752,261  | 12/28/2000  | Rainer Lienhart      | 042390.P10325           | 1229             |
| 7590  | 02/12/2004  |                      | EXAMINER                | SENFI, BEHROOZ M |
| Andre M. Gibbs<br>Blakely, Sokoloff, Taylor & Zafman LLP<br>Seventh Floor<br>12400 Wilshire Boulevard<br>Los Angeles, CA 90025-1030 |             |                      | ART UNIT                | PAPER NUMBER     |
|   |             |                      | 2613                    | 7                |
|   |             |                      | DATE MAILED: 02/12/2004 |                  |

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                        |                     |
|------------------------------|------------------------|---------------------|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b> |
|                              | 09/752,261             | LIENHART, RAINER    |
|                              | <b>Examiner</b>        | <b>Art Unit</b>     |
|                              | Behrooz Senfi          | 2613                |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on \_\_\_\_.
- 2a) This action is **FINAL**.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) 7-10, 14-18, 24 and 25 is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_ is/are allowed.
- 6) Claim(s) 1-6, 11-13, 19-23 and 26-29 is/are rejected.
- 7) Claim(s) \_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) All    b) Some \* c) None of:  
1. Certified copies of the priority documents have been received.  
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) The translation of the foreign language provisional application has been received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5.
- 4) Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_.

**DETAILED ACTION**

1. This application is subject to restriction and based on a phone conversation with applicant's representative (on Jan. 14, 2004). Applicant representative elects group 1 (claims 1 – 6, 11 – 13, 19 – 23 and 26 – 29).

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1 - 2 are rejected under 35 U.S.C. 102(e) as being anticipated by Foote et al. (US 2002/0028021).

Regarding claim 1, Foote '021 discloses "method for processing video" (i.e. fig. 2, abstract), comprising; "acquiring a video stream" (i.e. fig. 2), and "dividing the video stream into a plurality of sub-sections, and determine the probability of whether a transition to a separate sub-section is present ..... " (i.e. abstract, lines 22+, page 12, 0136, and page 13, 0146, lines 13 – 14 from the bottom of the page), and "embedding a probability of the transition into the sub-section of video stream" (i.e. fig. 2, col. 4, 0064, lines 12 - 15).

Regarding claim 2, Foote '021 discloses, "determining the probability is performed by a classifier" (i.e. fig. 2, 206).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 3, 4, 6, 11 – 13, 19, 21 – 23 and 26 - 29, are rejected under 35 U.S.C. 103(a) as being unpatentable over Foote '021 in view of Wilcox et al. (US 6,072,542).

Regarding claims 6, 13, 23 and 29, Foote '021 discloses "method for processing video and detecting transition in a video stream using classifier" as discussed above (claim 1). Foote '021 fails to explicitly teach, "transition is a dissolve or fade or wipe". However such features are well known and used as evidenced by Wilcox '542 (i.e. fig. 2, shows dissolve and fade) teaches dissolve/fade transition. Therefore, taking the combined teaching of Foote '021 and Wilcox '542 as a whole would make the above limitation obvious to one having ordinary skill in the art.

Regarding claims 3 – 4 and 12, combination of Foote '021 and Wilcox '542 teaches "outputting a location and duration of transition in said video stream, claim 4" (i.e. 0014 of Foote and fig. 7, t4 – t5 "duration of transition" of Wilcox) and "classifier is provided fixed size portion of video" (fig. 2, page 1, 0007, lines 1+ of Foote).

Regarding claims 11 and 27, combination of Foote '021 and Wilcox '542 teaches "separate shots comprising a uninterrupted subset of the video stream" (i.e. page 1, section 0008, lines 12 – 14 of Foote and col. 3, lines 41+ of Wilcox" and "first shot and

second shot transition ..... and determining duration of transition" (i.e. fig. 7, t4 – t5, col. 3, lines 24+ and 35+ of Wilcox).

Regarding claims 26 and 19, combination of Foote '021 and Wilcox '542 teaches one or more processors to perform operation (i.e. fig. 1, of Foote and fig. 8, of Wilcox) of the acquiring video stream and probability distribution ..... " (i.e. fig. 2 of Foote) and "first shot and second shot transition ..... and determining duration of transition" (i.e. fig. 7, t4 – t5, col. 3, lines 35+ of Wilcox), and as for time series (i.e. fig. 19 of Foote).

Regarding claims 21 - 22, combination of Foote '021 and Wilcox '542 teaches, "sampling rate to be used by classifier" (fig. 2, classifier 206 of Foote).

Regarding claim 28, the references Foote '021 and Wilcox '542 teaches segment including shots and shot includes multiple frames, therefore the presence of a transition would be between two frames (one is before the transition and one would be after the transition).

6. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Foote '021 in view of Chen et al. (US 6,335,990).

Regarding claim 5, method for processing video" (i.e. fig. 2, abstract), Comprising, "acquiring a video stream" (i.e. fig. 2), and "dividing the video stream into a plurality of sub-sections, and determine the probability of whether a transition to a separate sub-section is present ..... " (i.e. abstract, lines 22+, page 12, 0136, and page 13, 0146, lines 13 – 14 from the bottom of the page). Foote '021 fails to explicitly teach "pre-filter and post-filter". However such features are well known and used as evidenced by Chen '990 (fig. 1, 104, and fig. 2, 112, and abstract). Therefore, taking the combined

teaching of Foote '021 and Chen '990 as a whole, would make it well known the use of "filtering" that can be varied depending upon the complexity of the video as suggested by Chen.

7. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Foote '021 in view of Wilcox '542 further in view of Chen '990.

Regarding claim 20, combination of Foote '021 and Wilcox '542 teaches "method for processing video and detecting transition in a video stream using classifier" as discussed above. Combination of Foote and Wilcox fails to explicitly teach, "pre-filter and post-filter". However such features are well known and used as evidenced by Chen '990 (fig. 1, 104, and fig. 2, 112, and abstract). Therefore, taking the combined teaching of Foote '021 and Wilcox '542 and Chen '990 as a whole, would make it well known the use of "filtering" that can be varied depending upon the complexity of the video as suggested by Chen.

### ***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Behrooz Senfi** whose telephone number is (703)305-0132.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Chris Kelley** can be reached on (703)305-4856.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

**Or faxed to:**

**(703) 872-9314**

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relative to the status of the application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

B. S. B. S.

2/6/2004

*Chris Kelley*  
CHRIS KELLEY  
SUPERVISORY PATENT EXAMINER  
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